REMARKS

The specification and claims have been amended in order to improve the style of this application. In particular claims 1, 2, 4, 5, 9, 12 and 13 have been amended and new claims 14 - 20 have been added.

Applicant acknowledges the Examiner's indication that claims 6 and 7 include allowable subject matter, and Applicant thanks the Examiner for indicating allowable subject matter. Applicant also thanks the Examiner for the careful reading of the application, for pointing out discrepancies, and for providing suggestions.

Claims 1 and 4 have been rejected as being anticipated by D'Heureuse. Claim 1 has been amended to set forth that the form includes an IR absorption component. This absorption component is described in the specification on page 19, and is shown in Fig. 2 by reference 24b or 23. The absorption component can either be in the form of particles mixed in with the modifiable material, such as in Figs. 2a and 2c, or the absorption component can a layer such as shown in Figs. 2b and 2d. Applicant has reviewed D'Heureuse, and finds no teaching nor suggestion of an IR absorption component. Therefore claim 1 sets forth features which are not present in D'Heureuse, and therefore claim 1 defines over D'Heureuse.

New independent claim 19 also sets forth an IR absorption component. Therefore claim 19 also defines over D'Heureuse.

Applicant acknowledges that D'Heureuse describes an IR imaging unit 4 which removes a water layer, column 9 lines 23 - 27. However this inner 4 appears to act on the molecular water layer. There is no teaching nor suggestion that there is any printing form which includes

an IR absorption component. Applicant notes that the modifiable material of the present invention is inherently transparent to IR radiation. Therefore if the surface 12 of D'Heureuse is equated with the modifiable material of the present invention, then this surface would not absorb IR radiation. Applicant finds no teaching nor suggestion of any portion of a surface in D'Heureuse which would absorb IR radiation, and therefore the surface 12 of D'Heureuse cannot anticipate all of the features of the printing form of the present invention.

Claim 19 further sets forth that the modifiable material can be changed into a more hydrophilic state by irradiation by light and to a less hydrophilic state by heating. This is described in the specification on page 17 in the last paragraph, and in Fig. 1c. Claim 19 also sets forth that the heating causes the modifiable material to become lipophilic. Applicant finds no teaching nor suggestion of a material in D'Heureuse which becomes lipophilic and less hydrophilic by heating. Applicant's review of D'Heureuse finds that D'Heureuse does not distinguish between a less hydrophilic state and a lipophilic state. D'Heureuse only discusses materials with wetting properties that are reversibly changeable between a state with a very small contact angle and a state with a relatively large contact angle. D'Heureuse further describes material with surfaces that become amphiphilic under ultraviolet radiation, column 4 lines 35 - 40. Therefore the material of the present invention and D'Heureuse has different properties.

Applicant notes that D'Heureuse does describe a layer which is oleophobic, but that this feature belongs to the molecular water layer, and not to a surface of a printing form. Since it is only the present application which describes a material that becomes lipophilic and less

hydrophilic by heating, the material of the present invention further differs from the material of D'Heureuse.

Claim 5 has been amended to set forth that the humidifying unit creates a humidity which is lower in the lipophilic state and higher in the hydrophilic state. It would not be obvious for a person skilled in the art that a particular humidity during the irradiation would optimize hydrophilizing the surface of the printing form. This effect is disclosed by the present application at the bottom of page 10 and the top of page 11. However this effect is not disclosed by D'Heureuse. The water vapor in D'Heureuse is used in order to produce a molecular water layer. This water layer has an oleophobic function, i.e. is ink repellant, column 5 lines 17 - 19. Therefore the water layer in D'Heureuse is produced following the exposure to light, column 5 lines 4 and 5. Thus contrary to the present invention, the water layer in D'Heureuse is not produced during the UV radiation or the hydrophilic state, but thereafter since it has a different function. For the device of D'Heureuse, it is only essential that the water molecule layer is present after the UV radiation since the surface of the cylinder has to have a molecular water layer before IR is radiated on the surface and the image is written. The IR radiation removes the water on the parts to be imaged, and does not appear to effect the actual surface 12 in D'Heureuse. Thus, the water layer of D'Heureuse has a totally different purpose than the humidity of the present application which is used to avoid recombination of electron whole pairs during UV radiation.

D'Heureuse in particular does not disclose the different humidity for the lipophilic state and for the hydrophilic state. D'Heureuse only discloses providing a water vapor condition in

order to produce a molecular water layer in order to allow image writing. D'Heureuse does not disclose setting different humidity levels. Claim 5 therefore also defines over D'Heureuse.

Claim 2 sets forth a humidity of at least 60%. Applicant notes that in D'Heureuse, the molecular water layer is a very thin water layer, and thus a low humidity is sufficient. A person of ordinary skill in the art would not be led by such a very thin molecular water layer of D'Heureuse to have a humidity of at least 60%. Therefore claim 2 further defines over D'Heureuse.

New claims 15 - 18, and 21 set forth that the IR absorption component is either mixed in with the modifiable material, or is in separate layers from the modifiable material. Figs. 2a and 2c show one possible embodiment of the IR absorption component being mixed in with the modifiable component. Figs. 2b and 2d show a possible embodiment where the IR absorption component and the modifiable material are in separate layers. Applicant finds no teaching nor suggestion of D'Heureuse describing an IR absorption component being mixed in, or in separate layers from a modifiable material. Therefore these claims further define over D'Heureuse.

Claim 20 also sets forth that the printing form includes a carrier layer and an insulating layer. In the embodiment of Fig. 2, the carrier layer is represented by reference 21 and the insulating layer by reference 22. Applicant finds no teaching nor suggestion in D'Heureuse of an insulating layer. Therefore claim 20 further defines over D'Heureuse.

Claims 2, 3, 5 and 8 - 13 are rejected as being obvious over D'Heureuse in view of Pers. The rejection uses Pers to teach a humidifying unit for maintaining an optimum humidity in

column 5 lines 17 - 30. Applicant has reviewed this portion of Pers, and notes that this portion describes a humidifying device, however this humidifying device does not maintain an optimum humidity. Instead this humidifying device only determines humidity as part of the ambient conditions surrounding the press, and this determined humidity is stored in the memory of the computer. Therefore the humidity device of Pers does not maintain optimum humidity, but only measures the existing humidity. Since the humidity device of Pers only measures humidity, and does not adjust humidity, the humidity device of Pers is not similar to the humidifying unit of the present claims. These claims therefore further define over D'Heureuse and Pers.

Applicant again thanks the Examiner for indicating allowable subject matter. If the Examiner has any comments or suggestions which would further favorable prosecution of this application, the Examiner is invited to contact Applicant's representative by telephone to discuss possible changes.

At this time Applicant respectfully requests reconsideration of this application, and based on the above amendments and remarks, respectfully solicits allowance of this application.

Respectfully submitted
for Applicant,

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